

What is claimed is:

1 A sintered material product comprising:

a sintered copper alloy material; and

a skin formed on said sintered copper alloy material;

5 said sintered copper alloy material having pores each having an inlet diameter of 10 to 200 μm ;

wherein an average value of (inlet pore diameter)/(inner pore diameter) of each of said pores is 2 or more.

10 **2** The sintered material product claimed in Claim 1, wherein a porosity of said pores is 2 to 35% by volume and said average value of (inlet pore diameter)/(inner pore diameter) is 2 to 20.

3 The sintered material product claimed in Claim 1,
15 further comprising a layer of metal phosphate and/or metal oxide underneath of said skin.

4 The sintered material product claimed in Claim 1, wherein said skin is a skin comprising a solid lubricant.

5 A method for manufacturing a sintered material product
20 having a sintered copper alloy material and a skin formed on said sintered copper alloy material; comprising the steps of:

(A) processing said sintered copper alloy material with a selective chemical etching solution; and

25 (C) forming a skin on a surface of said sintered

copper alloy material, after the step (A).

6 The method claimed in Claim 5, further comprising the steps of:

5 (B) forming a layer of metal phosphate and/or metal oxide on the surface of said sintered copper alloy material, after said step (A) and before said step (C).

7 The method claimed in Claim 5, wherein said selective chemical etching solution comprises a solution containing a compound of one kind or more selected from the group
10 consisting of peroxide, peroxocompound, chromic acid, and permanganic acid.

8 The method claimed in Claim 5, wherein said selective chemical etching solution comprises a solution containing a compound of one kind or more selected from the group
15 consisting of peroxide, peroxocompound, chromic acid, and permanganic acid and a compound of one kind or more selected from the group consisting of phosphoric acid, sulfuric acid, nitric acid, hydrochloric acid, hydrofluoric acid, zirconic hydrofluoric acid, titanic
20 hydrofluoric acid, titanic acid, molybdic acid, tungstic acid, vanadic acid, niobic acid, and organic chelating agent.

9 The method claimed in Claim 6, wherein said step (B) comprises the step of processing said sintered copper
25 alloy material with a solution of a metal compound of one

kind or more selected from the group consisting of Zn, Ca, Mg, Mn, Ni, Co, Mo, W, Cu, Sn, Ti, Zr, V, In, and Cr.

5 **10** The method claimed in Claim 5, further comprising the step of ultrasonic cleaning said sintered copper alloy material after said step (A) and before said step (C).

11 The method claimed in Claim 5, further comprising the step of processing said sintered copper alloy material with a solution containing an organic alkali compound after said step (A) and before said step (C).

10 **12** The method claimed in Claim 6, further comprising the step of ultrasonic cleaning said sintered copper alloy material after said step (B) and before said step (C).

15 **13** The method claimed in Claim 6, further comprising the step of processing said sintered copper alloy material with a solution containing an organic alkali compound after said step (B) and before said step (C).

14 The method claimed in Claim 5, wherein said skin comprises a solid lubricant.